

# Implementing A Successful Idle Reduction Project

Briefing for:

Clean Cities Coordinators



## 5 Steps

- Step 1: identify and confirm the issues
- Step 2: identify and create the coalition
- Step 3: select alternatives or strategies
- Step 4: determine funding mechanism
- Step 5: implement project and get feedback



# Part I: Identify and Confirm Issues



## Where is the idling problem?

- Truck stops and rest areas
- Schools
- Bus terminals
- Tourist attractions and convention centers
- Large company terminals or distribution centers
- Rail yards (trucks and locomotives)
- Ports (trucks, locomotives, and marine vessels)
- Borders (trucks and locomotives)



# How to Assess the Idling Situation

- Do not assume there is an idling problem
- Investigate
  - Visit location
  - Observe idling behavior (direct observation vs. surveys)



## Truck Stops/Rest Areas

- Is overnight parking allowed?
- How many parking spaces?
- Is this an "end" destination or "pass-thru" destination (Hint: visit after 8pm. Is the lot full?)
- Count the number of trucks idling
- How many months of the year is the temperature, on average, above 80 degrees F or under 40 degrees F.



#### Schools

- How long are buses idling in front of the school?
- How long do the buses idle to warm-up the engine during winter months?
- How long do the buses idle to cool the compartment during summer months?

# Bus Depots, Distribution Centers, Tourist Attractions, Convention Centers

- How long are buses idling to heat or cool the compartment (winter/summer)?
- Does your state have an anti-idling law? Is it enforced?



# Rail Yards, Ports, Borders

- How long are trucks waiting and idling?
- How long are "switcher" locomotives idling?
- How long are marine engines waiting and idling?



## Part 2: Identify and Create Coalition



## Truck Stops/Rest Areas

- Private owner or State DOT
- Truck fleets that frequently use the truck stop
- Technology manufacturer (electrified parking spaces)
- State/Federal (EPA, DOT, DOE)
- Utility provider
- Community (EJ), environmental (ED), and health groups (ALA)
- Associations: ATA, NATSO



#### Schools

- School board
- PTA
- Bus drivers (union)
- Rest of the Group: technology manufacturer, state/federal, community, environmental, and health groups



# Bus Depots, Distribution Centers, Tourist Attractions, Convention Centers

- Private bus and truck operators
- State DOT
- City officials
- Bus associations
- Rest of the Group: technology manufacturer, state/federal, community, environmental, and health groups



#### Rail, Ports, & Borders

- Homeland Security, Customs
- Federal partners (EPA, DOT)
- Private companies
- Associations



# Part 3: Select your Alternative and/or Strategy



#### Truck Stops/Rest Areas

- Electrified Parking Spaces
  - All-inclusive model (no major modifications to truck)
    - Cost: \$15K-\$18K per space
  - Traditional model (requires truck come equipped with on-board electrical components and hardware)
    - Cost: \$3K-4K per space; \$2K-3K per truck
- No Idling Zone
  - Truck stop voluntary commitment
- State/local anti-idling law



#### Schools

- Direct fired heaters
  - 2 major manufacturers(www.epa.gov/smartway/idling)
- Idling policy
  - www.epa.gov/region1/eco/diesel/school\_buses. html
- Driver incentives
- State/local law



#### Buses

- Direct fired heaters
- Some APUs
- Automatic shut-down/start up devices
- Policy
- Driver incentives
- State/local law



#### Other Vehicles and Locations

- Large company terminals: electric, APUs, policy, driver incentives, state/local law
- Rail: APUs, electric, policy
- Ports/Borders: logistics (on-time delivery/pick-up), holding areas (electric), policy, state/local law



# Part 4: Funding



#### Grants

- EPA
  - Recently issued 9 grants to deploy and study truck stop electrification
    - Arkansas, California, Massachusetts, Missouri, New York, North Carolina, Oregon, Pennsylvania, and Washington
  - Periodic awards
  - Draft Energy Bill
- DOT
  - CMAQ awards
- DOE
  - Clean Cities, FreedomCar, NASEO



#### Loans

- DOT Programs
  - Section 129 "loan" of CMAQ
  - State Infrastructure Bank revolving loan
- DOE state initiative
  - State DOE creates loan



#### Future EPA Efforts

- Truck Stops: inviting truck stops to join SmartWay by installing electrified spaces
- State anti-idling laws: creating state model for anti-idling law
- Ports & Borders